

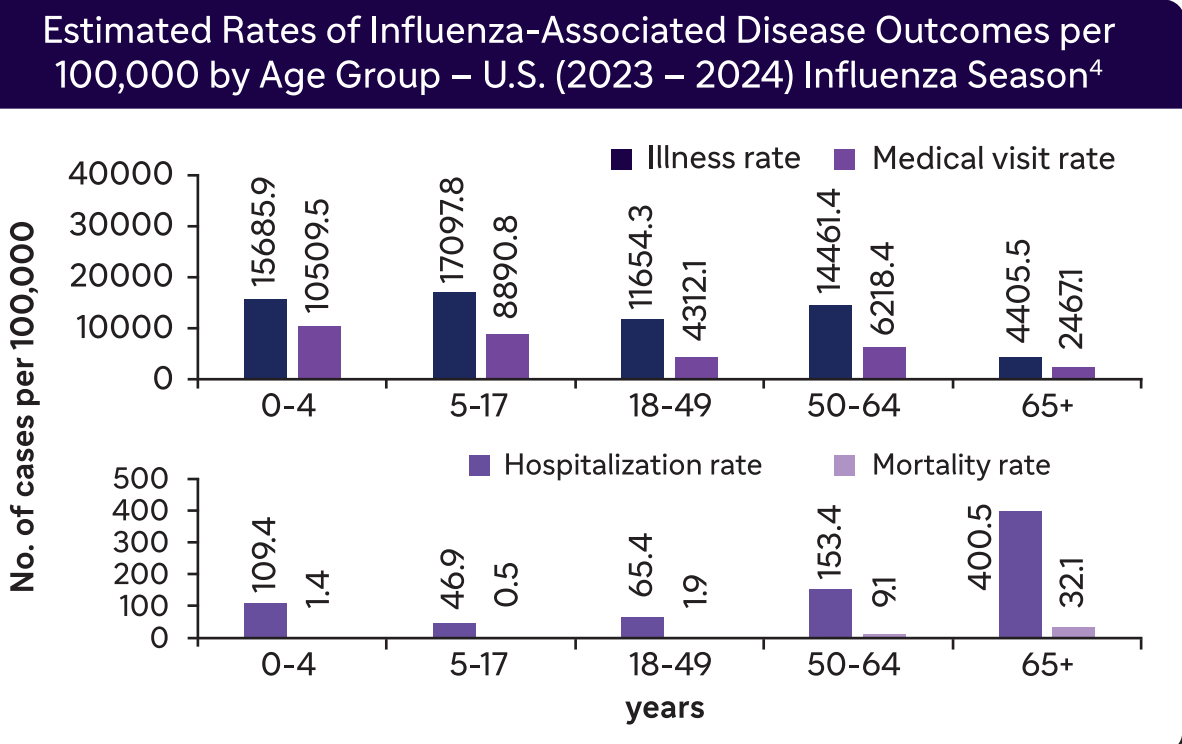
Influenza



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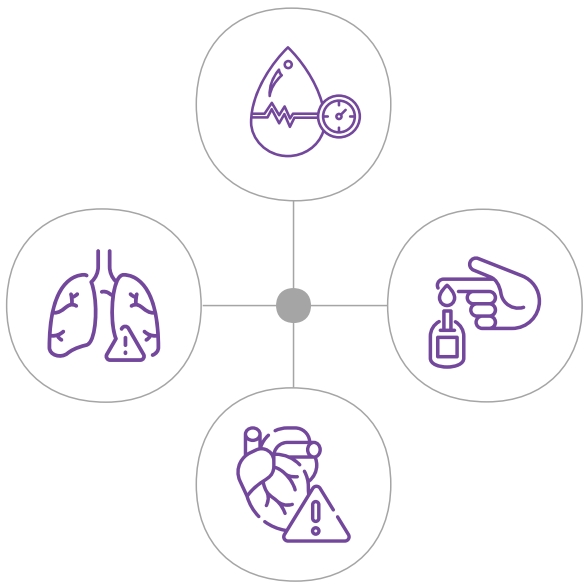
Public Health Threat for Adults

- Influenza can cause severe illness in all age groups; young children, older adults, and those with chronic conditions are at highest risk¹
- The **18–64 age group** comprises **>60% of the U.S. population** and has **lower vaccination rates** than children and older adults^{1,2}
- Adults ≥65 years of age face disproportionate influenza burden, but flu poses a serious risk to all adult age groups³
- Among working-aged adults, the incidence of influenza was **2x higher** in individuals aged 50–64 years compared to those aged 18–49 years³



Chronic Health Conditions Exacerbate Influenza Illness⁵

- Aging is associated with increased risk of chronic disease⁷
- 45% of U.S. adults report that they live with one or more chronic conditions⁷, such as:

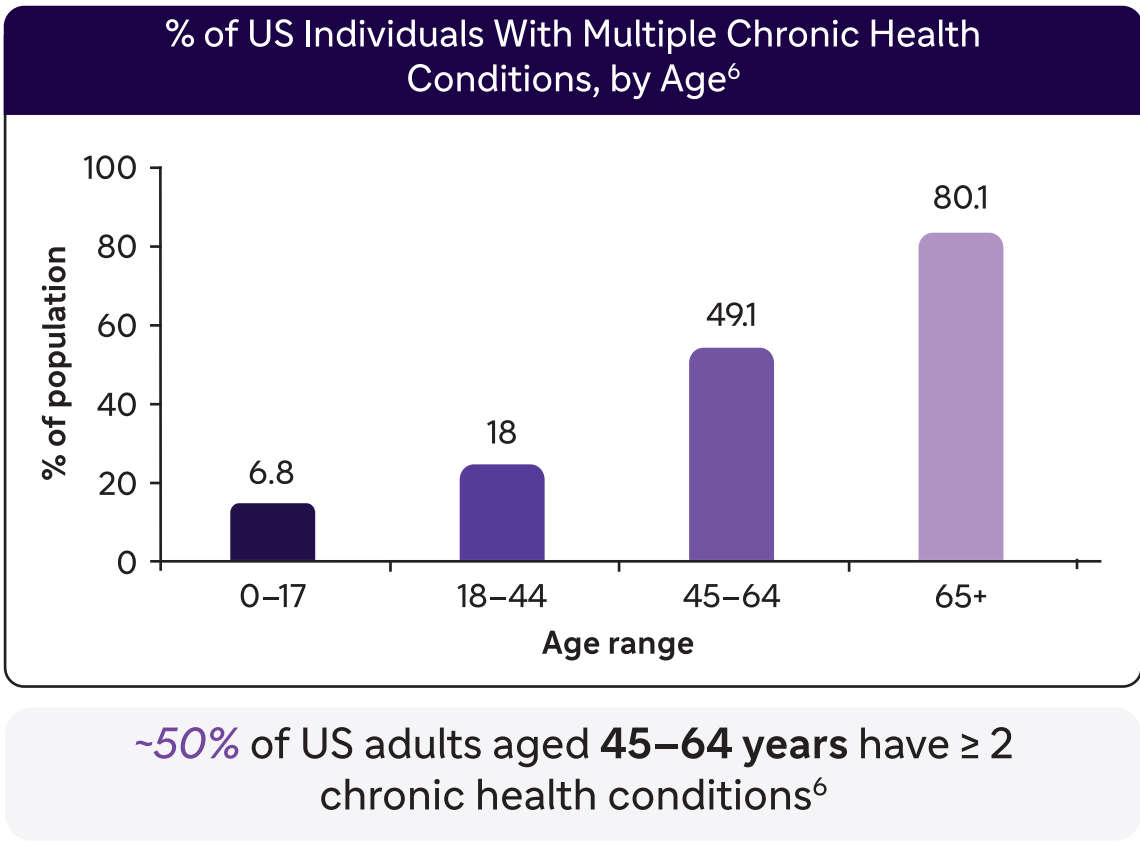


High blood pressure

Diabetes

Lung condition (COPD/Asthma)

Heart condition



Flu Vaccination is Critical in Adults With Chronic Health Conditions

The 2017-2018 flu season data showed that **adults over 50 years with chronic conditions** faced increased flu-related complications and hospitalizations⁶

Adults 50–64 years had...

- **3x higher risk** of hospitalization from flu
- **9-fold higher** mortality rate attributable to influenza ...than those aged 18–49 years⁸

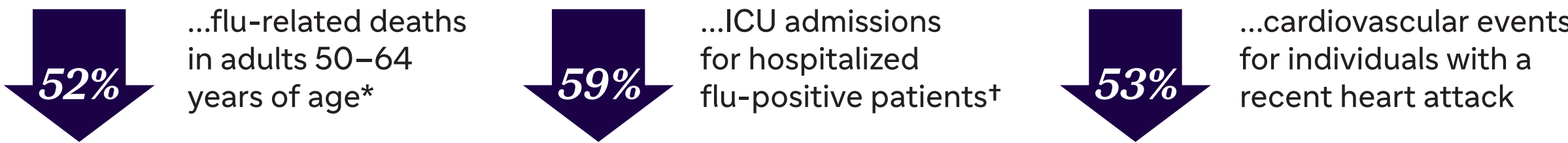
Flu may affect vulnerable age groups in the workforce, many of whom have family caregiving responsibilities⁶

Annual Flu Hospitalization and Mortality Rate Among 50–64 -Year-olds, by Major Underlying Conditions (2010–2011 to 2016–2017)³

Underlying Condition ^a	Average Annual Flu-Related Hospitalization Rate (per 100,000)	Average Annual Flu-Related Mortality Rate (per 100,000)
Asthma	35.0	0.8
Diabetes mellitus	39.8	1.4
COPD	41.4	1.6
Cardiac disease	72.1	3.6
Kidney disease	137.5	5.6

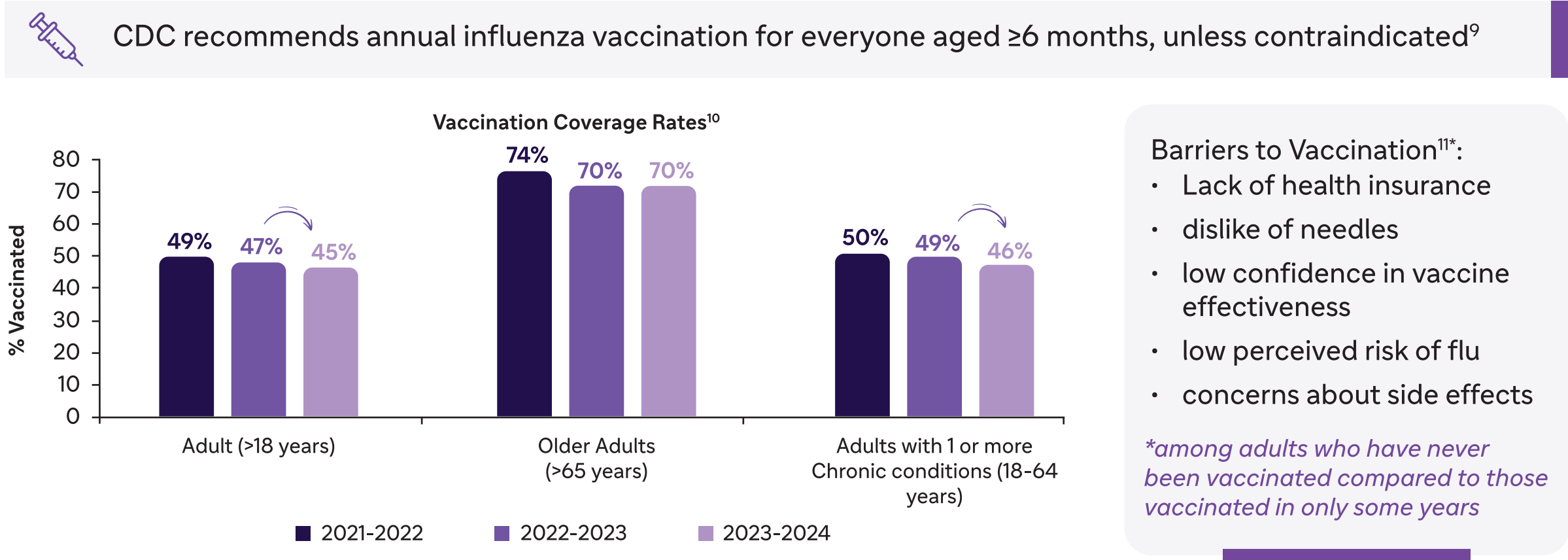
^aPopulation prevalence estimates for each underlying conditions (except morbid obesity) and their clinical definitions were as available from ICES

Flu Vaccination for Adults With Chronic Health Conditions Caused Decreases⁶ in...



*one study of adults hospitalized with lab-confirmed flu in 2013/2014 season; †study spanned multiple flu seasons (2012-2015) in New Zealand

Vaccination Coverage Gap & Increased Risk of Disease



Receipt of ≥1 dose of influenza vaccine during the season; Percentages have been rounded

In one study, factors driving suboptimal vaccination in adults 50–64 years of age:



Reducing the Economic Impact of Influenza Through Vaccination

The need for vaccination in patients aged 18–64 is compounded by increased economic burden including:

- Indirect costs (88%) e.g. work absenteeism¹²
- Direct costs (75%) e.g. hospitalizations¹²
- Flu-related hospitalization expenses significantly higher for at-risk populations compared to those not at risk¹²

Research suggests flu vaccinations are cost effective, as they can reduce costs related to **employee absenteeism, decreased productivity, and healthcare expenses**¹³

Flu vaccination is an important, yet underutilized, tool that may both reduce the economic burden of disease and provide protection against serious health consequences associated with the disease

ABBREVIATIONS: COPD, Chronic obstructive pulmonary disease; ICU, Intensive care unit; IDN, Integrated Delivery Networks; ICES, Institute of Clinical Evaluative Sciences.

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